

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,875	08/31/2001	Eric Elwood Gentry	10019418-1	2230

7590 05/19/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
----------	--------------

2126

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/943,875

Applicant(s)

GENTRY ET AL.

Examiner

VAN H NGUYEN

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/31/01 & 4/18/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-34 are presented for examination.

#### *Specification*

2. The abstract of the disclosure is objected to because *it exceeds the limit of 150 words*.

Correction is required. See MPEP § 608.01(b).

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 8-13, 16-22, 25-30, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming, III** (U.S. 6,530,018).

5. As to claim 1, Fleming teaches (*abstract*) the invention substantially as claimed including a hardware driver install system (*e.g., an installation mechanism*) used in conjunction with a computer system (*e.g., a computer system*), the install system apparatus comprising:

- means for determining if the hardware device is connected to the computer system  
(*abstract; col.2, lines 1-15, 21-24; and col.4, lines 54-64*); and

- means for installing a driver for the hardware device if it is determined that the hardware device is connected to the computer system (*e.g., installs the current driver on the computer system; abstract; col.5, lines 25-33; and fig. 3*).

Fleming does not explicitly teach “means for instructing a user to connect the hardware device if it is determined that the hardware device is not connected to the computer system.”

Fleming, however, discloses *taking appropriate action after the detecting step, such as installing the current driver following a reboot (abstract; col.2, lines 25-27; and col.4, lines 54-64)*.

It would have been obvious to one of ordinary skill in the art to have also included the step of instructing a user to connect the hardware device if it is determined that the hardware device is not connected to the computer system. By implementing this step, the user will be prompted to connect a hardware device to the system when they want to install a driver for the hardware device.

6. As to claim 2, Fleming teaches means for determining if a default driver exists for the hardware device (*e.g., a default driver; col.2, lines 31-34; col.3, lines 40-43; and col.5, lines 3-14*).

7. As to claim 3, While teaching the default driver, the driver, and the hardware device, Fleming does not explicitly teach “replacing the default driver with the driver for the hardware device.”

Fleming, however, discloses "*default driver 113 is used until current driver 116 can be installed*" (col.3, lines 3-14).

It would have been obvious to one of ordinary skill in the art to have applied the teaching of Fleming for "replacing the default driver with the driver for the hardware device" in order to provide means for facilitating the installation of the driver on the computer system. Note that the default driver allows the computer system to function in a restricted performance mode until the current the driver is installed, and if the device is a device that must be used during the retrieval process, such as a network interface controller, it may not be possible to perform the retrieval without the default driver.

8. As to claim 4, Fleming teaches means for acquiring the driver from a network source (*e.g., the system retrieves current driver 116 from server 112 across net work 111; col. 5, lines 14-24 and fig. 3*).

9. As to claim 5, Fleming teaches means for determining if there are a plurality of hardware devices connected to the computer system (*abstract; and col.4, line 54-col.5, line 14*).

10. As to claim 8, Fleming teaches means for using a default install system of an operating system for the computer system when installing the driver for the hardware device (*e.g., default driver 113 is used until current driver 116 can be installed; col.3, lines 3-14*).

11. As to claims 9-13 and 16, note the rejection of claims 1-6 and 8 above. Claims 9-13 and 16 are the same as claims 1-6 and 8, except claims 9-13 and 16 are method claims and claims 1-6 and 8 are system claims.

Art Unit: 2126

12. As to claim 17, Fleming teaches (*abstract*) the invention substantially as claimed including a method for installing (*e.g., an installation mechanism*) a driver (*e.g., device driver, a current driver*) for a hardware device (*e.g., a device*) on a computer system (*e.g., a computer system*), the method comprising:

- determining if the hardware device is connected to the computer system (*e.g., a detection mechanism that detects the presence of a device in a computer system; abstract; col.2, lines 1-15; and col.4, lines 54-64*); and

- determining if a default driver for the hardware device exists on the computer system if it is determined that the hardware device is connected to the computer system (*col.2, lines 31-34; col.3, lines 40-43; and col.5, lines 3-14*).

Note the discussion of claim 3 above for rejection of “replacing the default driver with the driver for the hardware device.”

13. As to claim 18, the rejection of claim 1 above is incorporated herein in full. Fleming further teaches installing the driver for the hardware device after the hardware device is connected to the computer system (*e.g., a detection mechanism that detects the presence of a device in a computer system...an installation mechanism that installs the current driver on the computer system; abstract*).

14. As to claims 19-22, 25, and 26, note the rejection of claims 1-3, 5, 4, and 8, respectively. Claims 19-22, 25, and 26 are the same as claims 1-3, 5, 4, and 8, except claims 19-22, 25, and 26 are computer readable medium claims and claims 1-3, 5, 4, and 8 are system claims.

Art Unit: 2126

15. As to claim 27, the rejection of claim 1 above is incorporated herein in full. However, claim 27 further recites a user interface. Inherently, a user interface must be included in the Fleming's system to notify the user if the device is connected to the computer system, and to prompt the user to connect the device to the computer system for installing the driver when the device is not connected to the computer system.

16. As to claims 28-30, 33, and 34, note the rejection of claims 2-3, 5, 8, and 4, respectively.

17. Claims 6-7, 14-15, 23-24, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming** in view of **Nykanen et al.** (U.S. 6,574,678).

18. As to claim 6, Fleming does teach means for determining if there are a plurality of hardware devices connected to the computer system, but does not explicitly teach means for determining which of the plurality of hardware devices connected to the computer system are to be removed.

Nykanen teaches means for determining which of the plurality of hardware devices connected to the computer system are to be removed (*figs 5a-5c and associated text*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nykanen and Fleming because Nykanen's teaching would have provided the capability for detecting and identifying the devices connected to the computer system, and removing the unused devices in the computer system. Therefore, facilitating the installation of the driver on the computer system.

Art Unit: 2126

19. As to claim 7, Fleming does not explicitly teach means for removing the plurality of hardware devices from a device object that are determined to be removed; and means for removing any shortcut for the plurality of hardware devices that are determined to be removed from the computer system.

Nykanen teaches means for removing the plurality of hardware devices from a device object that are determined to be removed; and means for removing any shortcut for the plurality of hardware devices that are determined to be removed from the computer system (*col.6, line 30-col.7, line 56*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nykanen and Fleming because Nykanen's teaching would have provided the capability for detecting and identifying the devices connected to the computer system, and removing the unused devices in the computer system. Therefore, facilitating the installation of the driver on the computer system.

20. As to claims 14-15, note the rejections of claims 6-7 above. Claims 14-15 are the same as claims 6-7, except claims 14-15 are method claims and claims 6-7 are system claims.

21. As to claims 23-24, note the rejection of claims 6-7 above. Claims 23-24 are the same as claims 6-7, except claims 23-24 are computer readable medium claims and claims 6-7 are system claims.

22. As to claims 31-32, the rejection of claims 6-7 above.

### ***Conclusion***

Art Unit: 2126

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Leigh (U.S. 6728787) teaches "System and method for locating and installing device drivers for peripheral devices."

- Cantwell (U.S. 6594690) teaches "Network peripheral device driver installer."

- Maxwell et al. (U.S. 6567860) teaches "Method and apparatus for new device driver installation by an operating system."

- Dodson (U.S. 6513159) teaches "Platform intelligent installer."

- Fleming, III (U.S. 6473854) teaches "Method for automatically retrieving and installing device drivers across a network."

-Fleming, III (U.S. 6442683) teaches "Apparatus for automatically retrieving and installing device drivers across a network."

-Doran, Jr. et al. (U.S. 6385766) teaches "Method and apparatus for windows-based installation for installing software on build-to-order computer systems."

-Curtis (U.S. 6374401) teaches "System, method, and program for updating registry objects with a cross-platform installation program."

-Delo et al. (U.S. 6363499) teaches "Method and system for restoring a computer to its original state after an unsuccessful installation attempt."

-Muruta (U.S. 6247081) teaches "Method and apparatus for installing drivers without requiring system re-boot."

-Merkin (U.S. 5715463) teaches "Installation utility for device drivers and utility programs."

-Chatterji (U.S. 5664195) teaches "Method and apparatus for dynamic installation of a driver on a computer system."

- Green "What you installed is what you see: help navigation in modular software products" 2000 IEEE, pp. 521-533.

- Rebello "How to distribute your software over the web" Web Mechanics, November/December 1999, pp. 79-81.


24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VHN

  
MENG-AI T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100